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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/468,246	12/20/1999	IAN M. WRIGHT	M-7825US	3396

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EXAMINER

TRAN, PHUC H

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/468,246

Applicant(s)

WRIGHT, IAN M.

Examiner

PHUC H TRAN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinohara (U.S. Patent No. 6067298) in view of Khacherian et al. (U.S. Patent No. 5768257).

- With respect to claims 1, 6, 10, 12, 17, 24-25, & 32-33, Shinohara teaches an apparatus for switching packets from a network (e.g. Fig. 1), the apparatus comprising:
an ingress receiver that receives packets from the network ("inbound packets") (block 20 in Fig. 1), the packets being destined for an associated output queue (each buffers 24 corresponds to buffers 31 as show in Fig. 1);

a switch fabric coupled to receive the inbound packets from the ingress receiver (block 102 in Fig. 1);

and an output traffic manager coupled to receive packets from the switch fabric ("outbound packets") (block 110 and 111 in Fig. 1), wherein the output traffic manager includes at least one queue (queue 31 in Fig. 1), the output traffic manager selectively stores outbound packets into a selected queue (col. 7, lines 24-27) and selectively drops outbound packets when the selected queue is at a certain fullness level (col. 3, lines 37-44). Shinohara teaches the output traffic manager communicates to the ingress receiver to suspend. Shinohara fails to teach the output traffic manager communicates to the

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ingress receiver to drop inbound packets destined for that queue. Khacherian from the same or similar fields of endeavor teaches the dropping outbound packets at input queue (bridge paragraph between cols. 2-3). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the dropping method of Khacherian into Shinohara at the input buffer to reduce the traffic load and during the congested period.

- With respect to claims 2, 11, & 16, Shinohara also teaches wherein the output traffic manager identifies at least the designation of imminently droppable or dropped outbound packets, and wherein the ingress receiver drops inbound packets based on an identified designation (e.g. output data controller monitors buffers and communicates back to input data controller, col. 4, lines 5-17).

- With respect to claims 3-5, 18-20, 26-28, and 34-36, Shinohara discloses wherein the designation comprises a port address to the network, or a class of service or virtual private network (e.g. the information of cells as Fig. 2).

- With respect to claims 7, 22, 30, & 38, Shinohara teaches wherein the ingress receiver discontinues inbound packet drop after a predetermined time (col. 14, lines 38-46).

- With respect to claims 8, 13, 21, 29, & 37, Shinohara discloses wherein the output traffic manager uses the switch fabric to communicate to the ingress receiver to drop inbound packets (block 102 in Fig. 1).

- With respect to claims 9, & 14, Shinohara also discloses wherein the output traffic manager uses a dedicated communications bus to communicate to the ingress receiver to drop inbound packets (line 70 in Fig. 1).

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- With respect to claims 15, 23, & 31, Shinohara teaches a method of reducing packet traffic through a switching fabric (e.g. the method controlling the buffering as Fig.

1), the method comprising:

receiving packets from a network ("inbound packets") (block 20 in Fig. 1);

transmitting each packet to the switching fabric (e.g. cells go through block 102 in Fig. 1);

selectively queuing packets from the switching fabric (queues 103 in Fig. 1);

detecting imminent or active dropping of packets ("dropped packets") due to a queue being full (block 115);

signaling to drop inbound packets destined for the queue (line 60 in Fig. 1);

and dropping inbound packets destined for the queue (col. 4, lines 5-17).

Shinohara fails to teach the output traffic manager communicates to the ingress receiver to drop inbound packets destined for that queue. Khacherian from the same or similar fields of endeavor teaches the dropping outbound packets at input queue (bridge paragraph between cols. 2-3). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the dropping method of Khacherian into Shinohara at the input buffer to reduce the traffic load and during the congested period.

Response to Amendment

3. Applicant's arguments filed 4/8/2004 have been fully considered but they are not persuasive.

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- In response to Applicant's argument that "the cited art fails to teach or suggest a system in which, 'approximately when the output traffic manager drops....'"

In page 3. Examiner respectfully disagrees. The claim languages

"approximately" and "about" in claim 1, could not interpret the metes and bounds of the claim so as to understand how to avoid infringement. Note the explanation given by the Board of Patent Appeals and Interferences in Ex parte Wu, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H TRAN whose telephone number is (703) 308-7471. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (703) 308-5463. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 872-9314.

Phuc Tran
Assistant Examiner
Art Unit 2664



P.t
June 24, 2004

DANG TON
PATENT EXAMINER